



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,490	01/06/2004	Kenneth Neil Whaling	JHN-839-1503	3555
36024 7590 12/23/2008 NIXON & VANDERHYE P.C. 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER RIVIERE, HEIDI M				
ART UNIT		PAPER NUMBER		
3689				
MAIL DATE		DELIVERY MODE		
12/23/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/751,490

**Applicant(s)**

WHALING ET AL.

**Examiner**

HEIDI RIVIERE

**Art Unit**

3689

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-16 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/CDC)  
4) ☐ Interview Summary (PTO-413)  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_  
Paper No(s)/Mail Date \_\_\_\_\_

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **30 September 2008** has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to **claims 1-16** have been considered however they are not persuasive. The rejections have not been withdrawn. Examiner used **Richman et al. (US 6,631,384 B1)**(hereinafter "**Richman**") in view of **Bentele-Calvoer et al. (US 2003/0160436 A1)**(hereinafter "**Bentele**") and further in view of **Kiron Chatterjee Ph.D "The Development and Role of Accident Predictive Models"**, University of Southampton (United Kingdom), 1995 (hereinafter "**Chatterjee**") to reject **claims 1-16** as obvious under 35 USC 103. Richman teaches a computerized information system and method using virtual databases. This system also contains analyses suited for safety applications. The system processes service difficulty reports having to do with the aviation industry. Bentele discusses the logic used to deploy airbags.

Art Unit: 3689

Bentele teaches the plausible scenarios, triggers and velocity diagrams for example that are used to determine deployment ahead of time. In continuation, Chatterjee discusses the effect of road design on safety. The discussion focuses on Accident Predictive Models by reviewing the relationship between accident frequency and explanatory variables. One of ordinary skill in the art would understand that an accident predictive model is useful if coupled with information on how accidents have been caused in the past and on how to avoid future accidents especially with the accident scenario report conveys plausible accident scenarios.

3. Once again, Applicant argues that the accident predictive models of Chatterjee are different that the accident scenario review. It would be obvious to one of ordinary skill in the art that both are performing the same task of safety review. In effect both are reports and therefore the information contained within is non-functional descriptive. Furthermore, in comparison to Richman, Applicant also claims a manipulation of data and data reports within a database. Applicant's arguments are not persuasive and therefore the rejection is not withdrawn.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the

Art Unit: 3689

prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Richman et al. (US 6,631,384 B1)**(hereinafter "**Richman**") in view of **Bentele-Calvoer et al. (US 2003/0160436 A1)**(hereinafter "**Bentele**") and further in view of **Kiron Chatterjee Ph.D "The Development and Role of Accident Predictive Models"**, University of Southampton (United Kingdom), 1995 (hereinafter "**Chatterjee**").

6. **With respect to claim 1: (currently amended)** Richman teaches:

- a. a). comparing the safety incident to a plurality of previously analyzed safety incidents stored in safety documentation for the product and selecting one of said safety incidents based on the comparison; (col. 5, lines 5-20 and 49-65; col. 13, lines 17-46 - matching the SDR or accident/incident reports is done by comparing the identifier with those in the Change file and census file )
- b. c). tailoring the existing ASR template to reflect the current ASR conducted for the safety incident; (col. 5, lines 5-20 and 49-65 – the data gathered for the SDR or accident/incident reports is corrected for errors) and
- c. e). updating the safety documentation to include the tailored ASR and the identified at least one corrective action template for the

safety incident. (col. 5, lines 5-20 and 49-65 – “the Change and Census datasets are updated each time a new SDR or accident/incident reports is integrated with a master SDR file of the master database”)

However, Richman does not teach b). conducting an accident scenario review (ASR) of the safety incident using an existing ASR template previously developed for the selected stored safety incidence and based on the accident scenario review, identifying at least one corrective action which avoids or mitigates future occurrences of the safety incident,

Bentele teaches b). conducting current accident scenario review (ASR) of the safety incident using an existing ASR template previously developed for the selected previously analyzed safety incidence; (Fig. 3-6, paragraphs 33-40 – different triggering scenarios identified and analyzed)

However, Richman/Bentele does not teach based on the accident scenario review, identifying at least one corrective action which avoids or mitigates future occurrences of the safety incident.

Chatterjee teaches d). based on the accident scenario review, identifying at least one corrective action which avoids or mitigates future occurrences of the safety incident, (Abstract paragraph 1 – Accident Predictive Models are used to identify safer design practice for vehicles in road safety)

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the SDR or accident/incident reports of Richman with scenarios and corrective actions of Bentele and Chatterjee,

Art Unit: 3689

respectively because of the need to have accurate accident report and documentation of how accidents happen and ways to prevent them.

7. **With respect to claims 2 and 10:** Richman teaches the safety incident is an accident which occurred during use of the product in fleet operation. (col. 5, lines 5-20 - SDR or accident/incident reports is based on data having to do with mechanical difficulties to engine failures as well as cockpit smoke/fires that occur during the use of an airplane)

8. **With respect to claims 3 and 11:** Richman/Bentele/Chatterjee teaches the limitations in the rejections above. However, Richman/Bentele/Chatterjee does not teach wherein the safety incident is a potential accident scenario identified during use of the product. Bentele teaches wherein the safety incident is a potential accident scenario identified during use of the product. (Fig. 3-6, paragraphs 33-40 – different potential accident triggering scenarios identified and analyzed).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the SDR or accident/incident reports of Richman with scenarios and corrective actions of Bentele and Chatterjee, respectively because of the need to have accurate accident report and documentation of how accidents happen and ways to prevent them.

9. **With respect to claims 4 and 12:** Richman/Bentele/Chatterjee teaches the limitations in the rejections above. However, Richman/Bentele/Chatterjee does not teach determining that the safety incident has a severity level above a threshold severity level before proceeding to step (a).

Art Unit: 3689

Bentle teaches determining that the safety incident has a severity level above a threshold severity level before proceeding to step (a). (paragraph 39 – threshold value used to calculate values needed for accident scenario).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the SDR or accident/incident reports of Richman with scenarios and corrective actions of Bentle and Chatterjee, respectively because of the need to have accurate accident report and documentation of how accidents happen and ways to prevent them.

**10. With respect to claims 5 and 13:** Richman/Bentle/Chatterjee teaches the limitations in the rejections above. However, Richman/Bentle/Chatterjee does not teach wherein said ASR includes constructing an accident scenario model of the safety incident and said model is based on the tailored ASR template.

Bentle teaches wherein said ASR includes constructing an accident scenario model of the safety incident and said model is based on the tailored ASR template. (Fig. 3-6, paragraphs 33-40 – different triggering scenarios identified and analyzed)

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the SDR or accident/incident reports of Richman with scenarios and corrective actions of Bentle and Chatterjee, respectively because of the need to have accurate accident report and documentation of how accidents happen and ways to prevent them.



Art Unit: 3689

11. **With respect to claims 6 and 14:** Richman/Bentele/Chatterjee teaches the limitations in the rejections above. However, Richman/Bentele/Chatterjee does not teach wherein said ASR identifies at least one causation for the safety incident and said at least one corrective action is intended to prevent a future occurrence of the causation. Chatterjee teaches wherein said ASR identifies at least one causation for the safety incident and said at least one corrective action is intended to prevent a future occurrence of the causation. (Abstract: paragraph 1 – Accident Predictive Models are used to identify safer design practice for vehicles in road safety).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the SDR or accident/incident reports of Richman with scenarios and corrective actions of Bentele and Chatterjee, respectively because of the need to have accurate accident report and documentation of how accidents happen and ways to prevent them.

12. **With respect to claims 7 and 15: (previously amended)** Richman teaches wherein said documentation further comprises a database of analyzed safety incidents and corresponding ASR template. (col. 5, lines 5-20 - SDR or accident/incident reports is based on data having to do with mechanical difficulties to engine failures as well as cockpit smoke/fires that occur during the use of an airplane).

13. **With respect to claims 8 and 16:** Richman teaches wherein step (c) includes creating an original ASR using the modified ASR template. (col. 5, lines

Art Unit: 3689

5-20 and 49-65 – the data gathered for the SDR or accident/incident reports is corrected for errors).

14. **With respect to claim 9: (currently amended)** Richman teaches:

a. a) record the safety incident in safety documentation for the product; (col. 5, lines 5-20 - SDR or accident/incident reports is based on data having to do with mechanical difficulties to engine failures as well as cockpit smoke/fires that occur during the use of an airplane)

b. c) comparing the safety incident to a plurality of previously analyzed safety incidents stored in the safety documentation and selecting one of said previously analyzed safety incidents based on the comparison; (col. 5, lines 5-20 and 49-65; col. 13, lines 17-46 - matching the SDR or accident/incident reports is done by comparing the identifier with those in the Change file and census file )

c. d) developing an accident scenario model of the safety incident using as a template an existing accident scenario model developed for the selected previously analyzed safety incidence; (col. 5, lines 5-20 - SDR or accident/incident reports is based on data having to do with mechanical difficulties to engine failures as well as cockpit smoke/fires that occur during the use of an airplane) and

d. f) updating the safety documentation to include the accident scenario model and at least one corrective action for the safety incident. (col. 5, lines 5-20 and 49-65 – “the Change and Census datasets are

Art Unit: 3689

updated each time a new SDR or accident/incident reports is integrated with a master SDR file of the master database")

Richman does not teach b) determining whether the safety incident has a severity level above a threshold severity level before proceeding to step (c) and e) identifying at least one corrective action which avoids the causation of the safety incident.

However, Bentele teaches b) determining whether the safety incident has a severity level above a threshold severity level before proceeding to step (c); (paragraph 39 – threshold value used to calculate values needed for accident scenario).

Richman/Bentele does not teach e) identifying at least one corrective action which avoids the causation of the safety incident.

However, Chatterjee teaches e) identifying at least one corrective action to avoid or mitigate future occurrences of the safety incident (Abstract paragraph 1 – Accident Predictive Models are used to identify safer design practice for vehicles in road safety)

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the SDR or accident/incident reports of Richman with scenarios and corrective actions of Bentele and Chatterjee, respectively because of the need to have accurate accident report and documentation of how accidents happen and ways to prevent them.

### **CONCLUSION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heidi Riviere whose telephone number is 571-270-1831. The examiner can normally be reached on Monday-Friday 9:00am-5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janice Mooneyham can be reached on 571-272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. R./

Examiner, Art Unit 3689

/Janice A. Mooneyham/

Supervisory Patent Examiner, Art Unit 3689

